



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/655,228

09/03/2003

M. Gregory Steintal

022420-000110US

5698

20350

7590

01/14/2005

TOWNSEND AND TOWNSEND AND CREW, LLP
TWO EMBARCADERO CENTER
EIGHTH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER

NGUYEN, THONG Q

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/655,228

Applicant(s)

STEINTHAL ET AL.

Examiner

Thong Q Nguyen

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings contain four sheets of figures 1-4 were received on 9/3/2003.

These drawings are objected by the Examiner for the following reasons.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) *because reference character "14" has been used to designate both "lead screw" and a bar connecting the focusing knob and the gear train. See figure 4. The Examiner is of opinion that the numerical reference "14" used to refer to the bar connecting the knob and the gear train should be changed to --9-- (see specification in page 7) because such reference is used to refer to a bar for connecting the knob to the element used to move the objective lens.* Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following features

Art Unit: 2872

recited in the claims must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

First, the feature related to the "embedded stereoscopic imaging system having an image detector" as recited in each of claims 1, 7 and 14; Second, the feature related to the prism in an optical viewing system as recited in each of claims 7 and 14; and Third, the feature related to the imaging optics in an imaging system as recited in claim 14.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
5. The disclosure is objected to because of the following informalities: a) Page 2, line 6, "that is a the end" should be changed to --that is at the end--;) Page 4: lines 15-16, "the objective lens could be movement could be" should be changed to --the objective lens movement could be--. There are still some grammatical and idiomatic errors in the specification. Applicant should carefully proofread the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claims 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- a) Claim 8 is rejected under 35 USC 112, second paragraph because the claim depends upon itself. The Examiner is of opinion that the claim should be amended to depend upon claim 7.
- It is also noted that if the claim 8 is amended to depend upon claim 7, then the applicant should also amend the claim 8 and each of claims 9-10 by changing

Art Unit: 2872

the term "said system" (line 1 of each claim) to --said (hand-held) stereoscopic system-- because the base claim 7 recites two systems (see lines 1 and 2 of claim 7).

b) Claim 12 is indefinite because the feature thereof "said focal length is the field of view" (lines 1-2) is indefinite. Since "the focal length" and "the field of view" are two different optical features of an optical element, then it is not understood why applicant has claimed that the focal length is the field of view.

c) The remaining claims are dependent upon the rejected base claim and thus inherit the deficiency thereof.

8. Claims 14-15 provide a method for simultaneously focusing a viewing system and an imaging system, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 14-15 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd. App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Objections

9. Claims 1, 4-5, 13-14 and 15 are objected to because of the following informalities. Appropriate correction is required.

a) Claim 1 recites the feature “the images”(line 6); however, such a feature lacks a proper antecedent basis. Should --formed by the objective lens—be added after “the images” (line 6) to make the claim comply with the requirements of 35 USC 112, second paragraph?

It is also suggested that the terms “at least on (1) pair of refracting telescopes” (line 2) be changed to --at least one pair of refracting telescopes--.

b) In claim 4, it is unclear about the term thereof “CMOS” (line 2). Should the claim be amended to provide a definition for the mentioned term?

c) In claim 5, the term “(CCD)” “line 2” should be deleted.

d) Each of claims 13 and 15 recites the movement of the objective lens is mane by a manual manner or an automatic manner; however, the use of the terms “may be” in each claim renders the claim unclear because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Should --is-- or other suitable term(s) be used in place of “may be” to make clear the feature claimed?

e) Claim 14 recites the features “the optical viewing system” (line 1) and “the embedded imaging system” (lines 1-2); however, each of the mentioned features lacks a proper antecedent basis. Should the term “the” in each of the mentioned

Art Unit: 2872

feature be changed to --an-- to make the claim comply with the requirements of 35 USC 112, second paragraph?

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-15, as best as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Steinthal et al (U.S. Patent No. 5,963,369) in view of Abe (U.S. Patent No. 5,581,399).

Steinthal et al disclose a hand-held binocular device for providing a 3-dimensional image to an observer and to a solid state imaging device disposed inside the binocular device. The binocular device comprises two telescopes (1A, 1A) each comprises an objective lens system (2), a beamsplitters (18), a solid state imaging system (12A) and an eyepiece (3) wherein the telescopes are supported by a frame (1B). The solid state imaging device (12A) is in the form of a CMOS photo array (12) with optical lens (13) positioned in the front surface of the photo array (12). See column 3 and figs. 2. The only feature missing from the hand-held binocular device provided by Steinthal et al is that they do not disclose that the objective lens of the telescope is moved for the purpose of focusing. The use of a mechanism for simultaneously moving the objective lens systems of the two telescopes constituting a binocular device for the purpose of focusing is

known to one skilled in the art as can be seen in the binocular device provided by Abe. In particular, Abe discloses a binocular device having a frame supporting two telescopes wherein each telescope comprises an objective lens system (31), a prism system (32) and an eyepiece system (35) wherein a beam-splitter (33) is used to split the light passed through the prism system to both an imaging system (41) and the eyepiece system (see columns 2-3 and fig. 1). The objective lens system (31) of each telescope comprises a plurality of lens elements. An autofocus system is used to move the objective lens system for the purpose of focusing. See column 3, lines 6-8. Regarding to the feature that the image detector is in the form of a charge coupled device or an optical sensor as recited in each present claims 5-6, such a feature is merely that of a preferred embodiment and not critical to the invention. The support for that conclusion is found in the present claim 4 in which the applicant has claimed that the imaging detector is in the form of a CMOS photo array which is clearly disclosed by Steinthal et al (see Steinthal et al, column 3, lines 60-65). Further, the use of an imaging detector in the form of a charge coupled device is also provided by Abe as can be seen in column 3, lines 53-58. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the binocular device for providing a 3-dimensional image to an observer and to a solid state imaging device disposed inside the binocular device as provided by Steinthal et al by moving the objective lens systems of the telescopes as suggested by Abe for the purpose of adjustment the focusing.

Art Unit: 2872

Conclusion

12. The additional references are cited as of interest in that 1) the U.S. Patent No. 6,487,012 discloses a binocular device having an observation system and an embedded imaging system; and 2) each of the U.S. Patent Nos. 5,729,384 and 5,212,591 discloses a binocular device having a mechanism for moving the objective lenses of two telescopes of the binocular device for the purpose of adjustment the focusing.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q Nguyen
Primary Examiner
Art Unit 2872